

REMARKS/ARGUMENTS

Status of the Application

In the Final Office Action, claims 11-16, 18, and 20 were rejected. In the present response, claims 11 and 18 have been amended so that claims 11-16, 18, and 20 are pending. No new matter has been added.

Rejections Under 35 U.S.C § 103(a)

Claims 11-16, 18, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over EP No. 0 439 050 A2 to Shvartsman in view of U.S. Patent No. 4,978,593 to Yin et al. in further view of U.S. Patent No. 4,519,065 to Lewis et al. The Examiner asserts that as the pattern formed by a die on a substrate is a design choice selected to serve an appropriate function, "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to select a die press with a certain relief pattern that forms the specified pattern on the substrate." The Examiner further claims that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the transparent substrate of Yin in the process of Shvartsman and apply that substrate to a windshield, as taught by Yin." The Examiner also asserts that it would have likewise been obvious to "use the hologram forming method of Shvartsman in the process taught by Yin." Finally, the Examiner asserts that in light of Lewis, "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to radiate through the transparent substrate taught by Shvartsman."

Specifically, the Examiner asserts that the abstract of "Shvartsman discloses a process for making an optical image element by applying a radically curable coating agent to the surface of a transparent substrate, embossing the coated surface by pressing it with an embossing die and then passing actinic radiation through the transparent substrate so as to cure the film while it is [in] contact with the embossing die, and then separating the die from the photohardened film." The Examiner also claims that page 7, lines 14-25 indicates that "the die may be formed from an optically transparent material", and that page 8, lines 45-52 "teaches that the radiation is UV light." Finally, the Examiner asserts that page 6, lines 34-45 of Shvartsman "teaches a clear protective layer applied to the embossed layer."

The Examiner concludes that the UV light wavelength allegedly disclosed by Shvartsman “reads on applicant’s wavelength range”, and that as the coating agent of Shvartsman is curable via UV radiation, it is “capable of being cured by thermal means.” The Examiner further concludes that the “if necessary” language of step E indicates step E is only an optional step, and therefore the protective layer taught by Shvartsman “is sufficient to read on applying this layer before and/or after this optional step.”

The Examiner, however, correctly recognizes that Shvartsman “does not specifically teach the pattern of the die”, but asserts that “[t]he pattern formed on the substrate is a design choice, and is selected by the manufacturer to serve the appropriate purpose.”

The Examiner further correctly recognizes that Shvartsman fails to “explicitly teach applying the optical element to a motor vehicle part”, and turns to Yin. The Examiner asserts that the abstract of Yin “discloses a process for forming holograms on transparent surfaces and applying these surfaces to windshields of automobiles in order to provide playback coatings”. The Examiner asserts that as the abstract of Shvartsman indicates that his embossed surfaces are holograms, Shvartsman is combinable with Yin.

Finally, the Examiner correctly recognizes that neither Shvartsman, nor Yin “teach that the radiation for curing is passed through a transparent die”, and turns to Lewis. Lewis, the Examiner asserts, “teaches that radiation for curing may occur through the transparent die such that films may be deposited on non-transparent substrates as well.” The Examiner claims that the motivation for combining these references comes from the “wider range of applicable substrates for the process taught by Shvartsman”.

As Applicants have amended claims 11 and 18 to further define step (a) as a “coating” step, Applicants’ reassert that Shvartsman, Yin, and Lewis, either alone or in combination, fail to disclose every element of Applicants’ claimed invention, and therefore the Examiner has failed to make out a *prima facie* case of obviousness as to Applicants’ claimed invention.

Indeed, section 2143.03 of Revision I of the Eighth Edition of the MPEP indicates that “[t]o establish *prima facie* obviousness of a claimed invention, all the

claim limitations must be taught or suggested by the prior art.” As previously pointed out by Applicants, however, Shvartsman in view of Yin et al. in further view of Lewis et al., fails to teach or suggest that a holographic image in accordance with Applicants’ claimed invention can be formed by coating a *cationically and/or radically curable coating agent* onto the surface of an automobile body or part thereof.

Although Applicants previously pointed out that page 3, lines 47-49 of Shvartsman indicates that his photohardenable film/layer is a laminate applied via a laminating step, and NOT a coating agent applied via a coating step as in Applicants’ claimed invention, the Examiner has responded by asserting that the coating agent limitation of Applicants’ claimed invention is not missing from Shvartsman because Applicants use of the term “applying” in claims 11 and 18 is broad enough to encompass Shvartsman’s laminating step. Despite Applicants’ belief that the thermoplastic composition disclosed by Shvartsman is NOT encompassed by the “applying a coating agent” step of Applicants’ claimed invention, Applicants have replaced the term “applying” with “coating” in order to more clearly define their claimed invention.

Moreover, Yin indicates throughout the specification and in the claims that his invention is directed at laminating a hologram containing thin substrate, such as glass, to a final transparent surface, i.e., a car windshield, to form the holograms of his claimed invention. So the thin substrate of Yin is likewise NOT a coating agent capable of being coated onto the surface of an automotive body or part thereof in accordance with Applicants’ claimed invention, but rather must be laminated onto the final transparent substrate, i.e., automobile windshield.

Accordingly, Applicants respectfully assert that the Examiner has not made out a *prima facie* case of obviousness because Shvartsman and/or Yin either alone, or in combination with Lewis fail to disclose each and every element of Applicants’ claimed invention. Applicants, therefore, respectfully request that the Examiner withdraw this rejection.

Even if all of the claim limitations can be found in the cited references, Applicants respectfully assert that Shvartsman, Yin and Lewis, fail either alone, or in any conceivable combination to teach or suggest Applicants’ claimed invention. In fact, Shvartsman expressly indicates in the abstract; at page 1, lines 8-9, 13-25 and

46-50; and in Example 1 at page 9, lines 28-30 that his invention is directed to a method for making what he variously refers to as an “optical image element”, “embossed optical element”, “embossed holograms”, and “holographic optical element”. A “holographic optical element” (HOE) is defined at <http://www.photonics.com/dictionary/lookup/XQ/ASP/url.lookup/entrynum.2408/pu./letter.h/QX/lookup.htm> (last visited May 10, 2004) as being “[a] component used to modify light rays by diffraction; the HOE is produced by recording the interference pattern of two laser beams and can be used in place of lenses or prisms where diffraction rather than refraction is desired.” An “optical element” is defined at <http://www.photonics.com/dictionary/lookup/XQ/ASP/url.lookup/entrynum.3642/letter.o/pu./QX/lookup.htm> (last visited May 10, 2004) as being “[a]n optical part constructed of a single piece of optical material. It is usually a single lens, prism or mirror.” Finally, an “embossed hologram” is defined at <http://www.photonics.com/dictionary/lookup/XQ/ASP/url.lookup/entrynum.1665/letter.e/pu./QX/lookup.htm> (last visited May 11, 2004) as being “[a] hologram imprinted on plastic or another medium; e.g., those commonly found on credit cards.” Moreover, the USPTO indicates at <http://www.uspto.gov/go/classification/uspc359/defs359.htm#C359S015000> (last visited May 10, 2004) that subclass 15 entitled “Using a hologram as an optical element” of Class 359 entitled “Optical: Systems and Elements” is directed at

“Subject matter wherein a holographic equivalent to an ordinary optical element is formed or used and wherein the holographic equivalent does not itself contain any intelligence or image information more significant than a point image.

(1) Note. The optical elements for which the hologram may be substituted include lenses, reflectors, diffusers, gratings, polarizers, beam splitters or combiners, filters, and phase plates or beam couplers.”

When all of this information is viewed in light of Example 1, which Shvartsman expressly indicates at page 9, lines 28-29 “illustrates the preparation of a holographic optical element for use in an optical scanner using preformed substrates” (emphasis added), it becomes readily apparent that the “optical element” of Shvartsman is an

optical diode. It becomes even clearer that the optical diode being prepared in accordance with the method of Shvartsman is a holographic equivalent of an ordinary optical element used in a laser scanning system, and is NOT directed at a process wherein holographs are being used to form decorative designs on automotive bodies and parts thereof in accordance with Applicants' claimed invention. Indeed, as is indicated via the definitions contained hereinabove, the "optical element" prepared in accordance with Shvartsman is designed to replace the lens or prism traditionally used in laser scanning devices. As a result, a person of ordinary skill in the art would under no circumstances apply the optical element of Shvartsman to an automobile body or part thereof in accordance with the Examiner's repeated assertions.

It is undeniably evident upon closely reading the entire disclosure of Shvartsman, that his "optical element" is in and of itself an object, just like a cup or saucer, and is NOT a coating of the type that can be applied to an automotive body or part thereof in accordance with Applicants' claimed invention. In light of the comments contained hereinabove, Applicants are confident that the Examiner will instantly understand that a person of ordinary skill in the art would be no more inclined to apply the "optical element" of Shvartsman to a motor vehicle body or part thereof as he/she would be to apply a cup or saucer to a motor vehicle body or part thereof. Applicants, therefore, respectfully assert that Shvartsman does not render Applicants' claimed invention obvious because Shvartsman either alone, or in combination with Yin and/or Lewis fails to teach or suggest Applicants' claimed invention. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

Moreover, there is no motivation to combine or modify Shvartsman, Yin and Lewis so as to arrive at Applicants' claimed invention. Section 2143.01 of Revision 1 of the 8th ed. of the MPEP indicates that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." As indicated hereinabove, however, Shvartsman is directed to a method for making an "optical element" that is the holographic equivalent of a lens or prism used in a scanning system; whereas Yin, in stark contrast, is directed to a method for making

holograms on transparent surfaces, such as automobile windshields, and Lewis, which is not even in the same ballpark, is directed at coded information bearing elements such as video discs.

The Examiner is well aware that the disclosures of Shvartsman, Yin and Lewis must provide the motivation for combining these references. Applicants, however, have been unable to find a single teaching or suggestion within Shvartsman, Yin or Lewis that would motivate a person of ordinary skill in the art to combine Shvartsman with either Yin and/or Lewis. In fact, Shvartsman and Yin seem to only have the word “hologram” an/or “holograph” in common, and the teachings of Lewis, which are directed at multilayer articles carrying coded information that can only be read by instrumentation as opposed to visual images, lettering, and visually readable symbols of any sort (see column 3, lines 54-68), seem to have even less in common with either Shvartsman or Yin. Indeed, the column 3, lines 54-68 disclosure of Lewis expressly teaches away from forming a visually pleasing holographic decorative design in accordance with Applicants’ claimed invention, and instead focuses on forming multi-layered articles, i.e., video discs, capable of carrying coded information that can only be decoded via electronic means—and NOT via visual means—that is viewed with the naked eye like the holographs of Applicants’ claimed invention.

As Applicants have been unable to find a single disclosure in Shvartsman, Yin, or Lewis that provides any motivation for combining the references in the manner asserted by the Examiner, Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection. In the event the Examiner refuses to withdraw this rejection, Applicants respectfully request that the Examiner identify the portions of each reference that allegedly provides the requisite motivation for combining the references.

Furthermore, Applicants respectfully assert that the Examiner is using hindsight reconstruction to arrive at Applicants’ claimed invention. In fact, Applicants believe the requisite motivation needed to combine Shvartsman, Yin and Lewis is not coming from the references themselves, but rather from Applicants’ specification. Indeed, it appears as if the Examiner, in direct contravention of the

statutory mandate of section 103 requiring obviousness to be judged at the point in time when the invention was made, is using Applicants' disclosure as a blueprint to reconstruct their claimed invention from isolated pieces of Shvartsman, Yin and Lewis. See, *Grain Processing Coro. v. Am. Maize-Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988).

The Examiner's use of hindsight is evident from his combination of such wholly unrelated references. Indeed, as indicated hereinabove, Shvartsman is directed at making holographic optical elements that replace lenses and prisms traditionally used in laser scanning devices, while Yin is directed at a method for making holograms on transparent surfaces, such as automobile windshields, via a laminating process, and Lewis is directed at coded information bearing elements, such as video discs, wherein the coded information is only decodable with electronic means, as opposed to being viewable visual images, lettering, or visually readable symbols of any sort. As a result, a person of ordinary skill in the art looking to form holographic images on an automotive body or part thereof that can be appreciated with the naked eye via a coating process that uses coating agents in accordance with Applicants' claimed invention would not logically look to prior art dealing with 1) holographic optical elements related to laser scanning devices, and/or 2) laminates—and NOT coating agents—containing a holograph, and/or 3) a multi-layer article containing coded information that CANNOT be visually appreciated with the naked eye. In the same vein, a person of ordinary skill in the art would not believe that piecing together portions of the presently cited references, wherein the references are so technologically unrelated to each other as already indicated hereinabove, could successfully arrive at Applicants' presently claimed holographic image forming process.

In light of the wholly unrelated nature of the subject matter of the references being cited by the Examiner, it is readily apparent that the Examiner is desperately trying to recreate Applicants' claimed invention via smoke and mirrors. In fact, Applicants respectfully assert that the Examiner is simply using Applicants' specification as a roadmap for backing the random disclosures of Yin and Lewis into Shvartsman so as to ultimately arrive at his destination of Applicants' claimed invention. As the Examiner's combination of Shvartsman, Yin and Lewis is

erroneously based on isolated pieces of these references, and these references are wholly unrelated technologically or otherwise to each other, the Examiner is engaging in impermissible hindsight reconstruction. As a result, the Examiner has failed to establish a *prima facie* case of obvious. Accordingly, Applicants respectfully request the Examiner withdraw all rejections predicated on combining Shvartsman, Yin and/or Lewis.

Finally, Applicants respectfully reassert that Shvartsman and Lewis are non-analogous prior art, and therefore cannot form the basis for a 35 USC § 103 rejection. Indeed, section 2141.01(a) of revision 1 of the 8th edition of the MPEP indicates that “[i]n order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).” What is “reasonably pertinent” is identified in section 2141.01(a) of the MPEP as being a reference, “even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals logically would have commended itself to an inventor’s attention in considering his problem.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

It becomes readily apparent upon reviewing the disclosures of Shvartsman and Lewis that neither of these references are either in the field of automotive coatings, or reasonably pertinent to the particular problem with which Applicants were concerned.

In contrast, Shvartsman is concerned with holographic optical elements in the laser scanning field, and Lewis is in the field of light/stylus-readable discs, such as compact discs, digital versatile discs, and the like, which are both about as far removed from automotive bodies and parts thereof as one can get. In fact, Lewis is not even concerned with embossing a holographic image onto readable discs, but rather is concerned with embossing visually imperceptible code onto the discs.

Furthermore, neither Shvartsman, nor Lewis are reasonably pertinent to the problem with which Applicants were concerned. That is, neither Shvartsman, nor Lewis would have commended itself to the attention of Applicants.

Indeed, Shvartsman is directed to a process for making a holographic optical element that can modify light rays by diffraction rather than refraction, and as such can be used in place of the lenses or prisms traditionally used in scanning devices. As a result, the holographs of Shvartsman are in no way expected to be visually pleasing, but rather are simply being utilized for their diffractive properties. Moreover, the holographs of Shvartsman are being applied via a laminating process and not a coating process.

Similarly, Lewis is directed to a process for embossing coded information—and NOT holographic images—via a radiation curable coating composition comprising either a conductive layer, or a reflective layer (col. 4, lines 40-42). In fact, the conductive or reflective layer of Lewis (see col. 1, lines 58-66) contains dispersed non-metallic or metallic particles in organic binders that achieve good conductivity (col. 14, lines 60-65), wherein the cationically and/or radically curable coating agent of Applicants' claimed invention not only does not contain any such dispersion of conductive particles, but is also non-reflective. In fact, if Applicants' claimed coating process involved any such reflective layer, the visible holographic image created by Applicants' claimed invention would be disturbed.

As Shvartsman and Lewis are neither in the field of Applicants' endeavor, nor reasonably pertinent to the particular problem with which Applicants were concerned, Applicants respectfully assert that Shvartsman and Lewis are non-analogous prior art. Accordingly, Applicants respectfully request that the Examiner withdraw all of the rejections predicated on these references.


Applicants are cognizant of the Examiner's bald assertions that Lewis is analogous prior art. Applicants, however, respectfully request in light of the comments contained hereinabove that the Examiner reconsider his position. If the Examiner continues to rely on Lewis as analogous prior art, Applicants respectfully request the Examiner provide further explanation as to why he considers Lewis analogous prior art, especially in light of the fact that Lewis is not only not in the field of automotive coatings, but deals exclusively with embossing coded information onto a disc, wherein the coded information is not only NOT a holograph, but is also—unlike the holographs of Applicants' claimed invention—NOT visually perceivable in anyway, shape or form.

Se. No. 09/856,345
Docket No. FA 1010 US NA

Summary

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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Dated: May 24, 2007